

IOWA VOLUNTARY

OPERATING PERMIT APPLICATION

INSTRUCTIONS



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Iowa Department of Natural Resources
Environmental Protection Division
Air Quality Bureau
900 East Grand Avenue
Des Moines, Iowa 50319

APPLICATION INSTRUCTIONS
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Part 3-V Compliance Application Certification

Part 3-V Noncompliance Application Certification

IOWA VOLUNTARY OPERATING PERMITS

Air Quality Permitting

Historically the Iowa Department of Natural Resources has issued air quality construction permits only.

The purpose of the construction permit is to evaluate, before equipment installation, whether the proposed equipment or air pollution control equipment has the potential to comply with the emission standards and the Clean Air Act Amendments of 1990. With the passage of the Clean Air Act Amendments of 1990, states are required to implement an air quality operating permit program, often referred to as a Title V permit from Title V of the 1990 Amendments. While the construction permits are issued for the life of the equipment or until a modification is proposed, the Title V operating permits are renewable on a 5 year cycle with an annual fee payment based upon actual emissions.

Voluntary Operating Permit

If you are subject to the Title V Operating Permit Program, the Voluntary Operating Permit Program may offer an alternative to obtaining a Title V permit.

Qualifying for Voluntary Operating Permits

Those facilities which would qualify for a Voluntary Operating Permit are those whose after-control potential emissions exceed the thresholds listed below - but whose actual emissions are less than those thresholds per 12-month rolling period. In obtaining a Voluntary Operating permit potential emissions must be limited through restrictions on hours of operation, process throughput, or other means such that the plantwide potential emissions of each regulated air contaminants are brought below the Title V applicability thresholds.

There are three major exceptions to the above statement concerning who may be eligible for the Voluntary Operating Permit Program.

✕. Any source which is not in compliance with all applicable regulations (other than the requirement to obtain construction permits) is not eligible for Voluntary Operating Permits. Part 2 of this package is designed to help decide if facilities are in compliance with the different air quality programs and regulations.

✕. Sources subject to Title IV (Acid Rain) and Municipal Waste Combustors subject to section 129(e) of the Clean Air Act of 1990 are not eligible to apply for Voluntary Operating Permits.

✕. If process equipment or control equipment has been installed, constructed, or modified at your facility since September 23, 1970 and the process is not specifically exempted in the rules from construction permitting, a permit should have been obtained prior to initiating construction. Sources which have not submitted construction permit applications for unpermitted equipment by the application deadline are not eligible for Voluntary Operating Permits and must apply for a Title V Permit.

Advantages and Disadvantages to Voluntary Operating Permits

Major advantages of obtaining Voluntary Operating Permits rather than Title V Permits are that there are no fees associated with Voluntary Operating Permits, there is no requirement for enhanced monitoring, and there is less information required for the application.

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However, each facility must consider that, if the facility anticipates needing a Title V Operating permit in the near future that it may be easier to obtain the Title V permit than first obtaining a Voluntary Permit and then later obtaining a Title V permit. Facilities holding Voluntary Operating permits may not operate outside of the limits established in the Voluntary Operating Permit without **first** obtaining a Title V Operating Permit.

VOLUNTARY OPERATING PERMIT APPLICATION

The owner or operator of an air pollution source applying for a Voluntary Operating Permit is required to submit to the Iowa Department of Natural Resources 2 copies of an application for a permit covering all emission units and air pollution control equipment at the source, including all emissions generating activities, including fugitive emissions and those emissions defined as insignificant emissions in 567 IAC 22.103.

Voluntary Operating Permit Application DUE DATE

The complete application submittal consists of the required forms from Parts 1, 2 and 3 of the application package and is due no later than 90 days after EPA approval of Iowa's program.

Voluntary Operating Permit Application CONTENTS

The Voluntary Operating Permit Application form is divided into 3 parts. Part 1 includes the general facility and emissions information. Part 1 resembles an emissions inventory but must also include stack dimensions, flow rates, temperatures, emission concentrations, etc. You should not use the EIQ information prepared last summer to document your **potential emissions** unless there have been no changes to your plant since last year and you have checked your calculations carefully. Remember that your **actual emissions** calculations are to be based upon your 1993 operations.

Part 2, Section 1 of the Voluntary Operating Permit Application is a guide to help in the identification of all the applicable requirements for the emission units at your facility. This is only intended as a guide and for Voluntary Operating Permit Applicants is not required to be submitted, but will help you to determine whether you are in compliance with all air quality rules. Section 2 must be submitted for only those pieces of equipment for which alternative limits are being proposed. Only VOL-01 of Section 3 is required to be submitted for those facilities that are not in compliance with the requirement for obtaining a construction permit.

Part 2, Section 4 must be used to make proposals in the Voluntary Operating permit application to establish limits on the potential to emit.

Section 4 may also be used if alternative emission limits or operating scenarios are being proposed.

Part 3 of the Voluntary Operating Permit Application is the Certification of Truth, Accuracy and Completeness and Certification of Compliance. You will find two copies of Form 1.0 and Part 3 in the application package. This was intentional to accommodate the Title V application process.

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You should disregard the second copy of Form 1.0 and both copies of Part 3 in the forms package.

There is a special Part 3-V form enclosed in this instruction package that should be used for the certification of truth, accuracy and completeness for the Voluntary Operating Permit application. A new Part 3-V Noncompliance Form has been included to be used if construction permits have been applied for but not received.

Definitions

Many of the terms used in this set of instructions and in the permit application are defined within the enclosed copy of the rules. General air program definitions are found in 567--22.2; Nonattainment area definitions are found in 567--22.5(1); Title V definitions, the list of "Hazardous Air Pollutants", and the list of "High Risk Pollutants" are found in 22.100; and the Acid Rain definitions are found in 22.120.

Thresholds

To determine if your facility is subject to the Title V Operating Permit Program or the Voluntary Operating Permit Program, you should determine if the after-control **POTENTIAL** emissions¹ exceed any of the following:

<u>Operating Permit Major Source Thresholds</u>	
Pollutant	Threshold
Carbon Monoxide	100 tons per year
Total Suspended Particulate	100 tons per year
PM-10 Particulate	100 tons per year
Volatile Organic Compounds (VOC's)	100 tons per year
Nitrogen Oxides	100 tons per year
Sulfur Dioxide	100 tons per year
Lead	100 tons per year
Any single Hazardous Air Pollutant(HAP)	10 tons per year
All HAP's combined	25 tons per year

The full definition of Title V applicability, which includes NSPS, NESHAP and acid rain sources, is found in the enclosed copy of the rules in Chapter 22, page 23, 567--22.101 IAC. **READ THIS DEFINITION CAREFULLY.** Note that non-major sources that would otherwise be subject to Title V permitting are deferred from that permitting for a period of 5 years.

Potential to emit is calculated assuming that your equipment is running at maximum capacity while operating at the maximum hours of operation under its physical and operational design.

¹ Potential to emit may include fugitives for some source categories. Refer to 567 IAC 22.101 and 22.100 definitions of "Major source" and "Stationary source categories."

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Usually, maximum hours of operation is 8760 hours per year unless enforceable limitations on hours of operation have been incorporated within the construction permit or an enforcement order for that equipment. Bottle-necks in a production line do not constitute an enforceable limitation unless those bottle-necks are included as an operating condition in a federally enforceable permit. Therefore, in most cases bottle-necks can not be used as a basis for limiting an emission unit's capacity below the manufacturer's rated capacity. **Only enforceable limitations on raw materials, fuels, capacity or hours of operation can be used to limit potential emissions.**

Fugitive emissions must be included when calculating potential emissions to determine Title V applicability if your facility is one of the 27 "Stationary Source Categories" listed in 567 IAC 22.100.

If your facility is not one of the 27 "Stationary Source Categories", fugitive emissions are not included for determining applicability but must be included along with all other point sources of emissions when completing the application.

UNPERMITTED SOURCES

✕. If process equipment or control equipment has been installed, constructed, or modified at your facility **since September 23, 1970**, and the process is not specifically exempted in the rules from construction permitting, a construction permit should have been obtained prior to initiating construction.

✕. Sources of Volatile Organic Compounds (VOCs) must obtain construction permits if constructed or modified since April 1987.

✕. Sources which have not obtained the necessary construction permits prior to construction must obtain those permits ("as-built" construction permits).

✕. Sources not required to obtain construction permits are required to be in compliance with all applicable air quality rules.

✕. If, at the time of submitting a Voluntary Operating Permit application, a construction permit has not been applied for an already constructed source that is subject to construction permitting requirements, **you will not be able make the necessary certification of compliance with all applicable requirements.**

OBTAINING OPERATING PERMIT APPLICATIONS

Based on the responses to last summer's Emission Inventory Questionnaire mailing, the Department is sending Operating and Voluntary Operating Permit Application packages to those facilities who indicated that they may be subject to Title V. Some sources may be sent an application package in error and some sources may not receive a package who should. It is your

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responsibility to determine if you are subject to Title V permitting. If you need an application package for a facility that did not receive one, please contact Jason Marcel at (515) 242-5014.

Filling Out The Application Forms

1. Provide an index to your application. Applications may be organized by form number or by emission point.
2. Type or print all information submitted. Because of the large number of applications that the department will have to process and the data entry requirements for this information, a typed submittal is preferred. Illegible documents are not acceptable and will be returned as incomplete.
3. Unlike last years emissions inventory project, grouping of emission units is going to be much more restrictive. Only emission units that are identical and subject to the same regulatory requirements may be grouped for the purposes of the Voluntary Operating Permit Application.
4. Emission factors will be the basis for many company's calculations of emissions. The Department will not provide you with emission factors directly. However, if you do not have test data or continuous emission monitor data from which to calculate your emissions, you will need to obtain access to EPA's emission factors. Sources of emission factors are as follows:
 - a) CHIEF Bulletin Board - This is EPA's source for the latest information on air emission inventories and emission factors. The Clearinghouse For Inventories And Emission Factors (CHIEF) provides electronic bulletin board (BB) access to several tools for estimating emissions of air pollutants. You can access and download the following from the CHIEFBB: SPECIATE, FIRE, XATEF, TANKS, The CHIEF Newsletter, the AIRS Facility Subsystem emission factors, all of the AP-42 stationary source volume, and the draft parts of AP-42 undergoing revision. To access CHIEF BB, you need a personal computer, modem, and communication package capable of communicating at 300, 1200, 2400, or 9600 baud. The CHIEF BB is open to all involved in air emission estimation. **For CHIEF registration or other information, call (919) 541-5232.**
 - b) Fax CHIEF offers AP-42 sections for immediate delivery by facsimile machine. A facsimile (Fax) machine with a phone headset as part of the fax machine is required equipment for using Fax CHIEF. This ensures that your fax phone line can transmit the signal indicating that it is ready to receive the CHIEF fax. To connect with Fax CHIEF dial (919) 541-5626 or 541-0548 and follow the directions. Only two documents may be requested per call. You should be aware that many of the documents are quite lengthy.
 - c) The Factor Information and Retrieval Data System (FIRE) is a personal computer program containing EPA's recommended criteria and hazardous air pollutant emission estimation factors. FIRE includes information about industries and their emitting processes, the chemicals emitted, and the emission factors themselves. FIRE is a user-friendly, menu-driven system with an interface patterned after Microsoft Windows. Users can browse through records in the data base or can select specific emission factors.

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FIRE is distributed on one 3.5" pc disc, free to government agencies. Other requesters must purchase FIRE or download it from the CHIEF BB. Users will need an IBM compatible pc that runs MS-DOS version 3.3 or later, with fixed disc having at least 10 MB of available storage, 512 KB free RAM, and a VGA color monitor. MS-DOS 5.0 or later is recommended. Contact Info CHIEF at (919) 541-5285 for help or more information.

d) XATEF is the Crosswalk/Air Toxic Emission factor database developed for use on PCs. Crosswalk lists the chemicals that could be expected to be emitted from a given source. XATEF is a collection of air toxic emission factor data for those pollutants which links toxic air pollution data to potential emission sources. The XATEF system preceded FIRE. You should be aware that some of the latest air toxic emission factor data has not yet been incorporated into FIRE and you may wish to access the XATEF database.

e) The Compilation of Air Pollutant Emission Factors, AP-42, is the recommended source of air pollutant emission factors, with descriptions of activities producing criteria and toxic emissions. AP-42 Volume I addresses hundreds of stationary point and area sources, and Volume II deals with mobile sources. Emission data for many polluting activities are obtained from source tests, material balance studies, and engineering estimates. EPA supplies AP-42 to government control agencies, and others should purchase the document. For more details, contact the Info CHIEF, (919) 541-5285. Copies of AP-42 are also available from the National Technical Information Service at (703) 487-4650.

f) TANKS is a user friendly pc software program for estimating volatile organic compound emissions from both fixed and floating roof storage tanks. A brochure describing TANKS is available from the Info CHIEF at (919) 541-5285.

g) SPECIATE is a clearinghouse for speciation factors for both volatile organic compounds (VOC) and particulate matter (PM). SPECIATE runs on a PC and presents speciation data by source category and by Source Classification Code (SCC).

h) Other sources of emission factors are your trade associations and equipment manufacturers. Be sure to identify the source of your emission factors in item #23 on Form 3.0, and item #22 on Form 4.0.

VOLUNTARY OPERATING PERMIT APPLICATIONS

PART 1 - EMISSION INFORMATION

1. Form 1.0 FACILITY IDENTIFICATION: This form must be filled out at this time and every time any supplemental information is submitted.
2. Form 1.1 PLANT LOCATION & LAYOUT DIAGRAM: This form is **NOT** required for Voluntary Operating Permit Applications.
3. Form 1.2 SCHEMATIC - PROCESS FLOW DIAGRAM: This form is required for Voluntary Operating Permit Applications.
4. Form 1.3 INSIGNIFICANT ACTIVITIES - POTENTIAL EMISSIONS (567 IAC 22.103): This form is **MAY NOT BE USED** for Voluntary Operating Permit Applications.
5. Form CA-01 - Calculations: Include this page as an attachment for each emissions unit for potential and actual emissions calculations as required.
6. Form 1.4 POTENTIAL TOXIC EMISSIONS - SIGNIFICANT ACTIVITIES: This form is required for all emission units which have hazardous air pollutants.
7. Form 1.5 POTENTIAL EMISSIONS - SIGNIFICANT ACTIVITIES: This form is required for all emission units.
8. Form 2.0 EMISSION POINT INFORMATION: This form is required for Voluntary Operating Permit Applications.
9. Form 3.0 EMISSION UNIT DESCRIPTION - POTENTIAL EMISSIONS: This form is required for all emission units.
10. Form 4.0 EMISSION UNIT - ACTUAL OPERATIONS AND EMISSIONS: This form is required for all emission units.
11. Form CE-01 POLLUTION CONTROL EQUIPMENT DATA SHEET: This form is required for all emission units.
12. Form ME-01 CONTINUOUS MONITORING SYSTEMS: This form is **NOT** required for Voluntary Operating Permit Applications.
13. Form 5.0 TITLE V ANNUAL PERMIT FEE: This form is **NOT** required for Voluntary Operating Permit Applications.

PART 2 - REQUIREMENTS AND COMPLIANCE

1. Section 1 AIR POLLUTION CONTROL REQUIREMENTS: This form is **NOT** required for Voluntary Operating Permit Applications. This section is intended as a guide to help you determine which regulations your facility is subject to and to help you determine whether the facility is operating in compliance with all applicable rules.
2. Section 2 APPLICABLE REQUIREMENTS: This form **is** required for Voluntary Operating Permit Applications but **ONLY** for those pieces of equipment for which alternative limits are being proposed.
3. Section 3 COMPLIANCE PLAN, SCHEDULE AND CERTIFICATION: If the facility is in compliance with all applicable regulations, this section is not required. The compliance certification is to be made using one of the special 3-V forms contained in the Voluntary Instructions. If the facility has not obtained the necessary construction permits, the Form VOL-01, Voluntary Operating Permit Compliance Schedule, **must be used**.
4. Section 4 PROPOSALS (LIMITS & ALTERNATIVES): **This form is required for Voluntary Operating Permit Applications if you are proposing limits to become eligible for a Voluntary Operating Permit**, alternative limits or operating scenarios in your application.

REMEMBER: YOU MAY NOT APPLY FOR A VOLUNTARY OPERATING PERMIT IF YOUR FACILITY IS NOT IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS (WITH THE EXCEPTION OF HAVING ALL REQUIRED CONSTRUCTION PERMITS). YOU MUST HOWEVER, USE THE NONCOMPLIANCE FORMS AND THE VOLUNTARY OPERATING PERMIT COMPLIANCE SCHEDULE.

PART 3-V APPLICATION CERTIFICATION

1. Part 3-V COMPLIANCE OR PART 3-V NONCOMPLIANCE APPLICATION CERTIFICATION: **This application certification must be properly signed, completed and submitted with all applications and with supplemental information submitted in support of this application. Applications submitted without appropriate signatures will not be considered to be complete.**

VOLUNTARY OPERATING PERMIT APPLICATION INSTRUCTIONS FORM 1.0 FACILITY IDENTIFICATION

This is a **REQUIRED** form for all facilities.

Permit Application For: Check the box that is appropriate for your current submittal. This application package contains 1 set of forms which can be used for either a Title V Permit application or a Voluntary Operating Permit application. There are separate instructions for each type of permit in this package. **Be sure that you have the set of instructions for the type of permit for which you are applying.** This set of instructions is only for Voluntary Operating Permit Applications.

Permit Application Type: Check the box/boxes that are appropriate for your current submittal. If additional information is requested by DNR that submittal must include another Form 1.0 identifying your facility and another Part 3-V, Application Certification of Truth and Accuracy. The box on Form 1.0 for Supplemental Information should be checked in this circumstance.

Between the time of permit application and permit issuance some facilities may undergo changes of equipment or operation or the source may have become subject to regulations promulgated after the time of the permit application. These changes may require that a construction permit be obtained and the Voluntary Operating Permit be amended. If the issuance of a construction permit acts to make the source no longer eligible for a Voluntary Operating Permit, then the source shall be required to immediately apply for a Title V Operating Permit and shall be subject to enforcement action for operating without a Title V Operating Permit.

Application Includes: The required forms from Parts 1, 2 and 3-V must be submitted by the March 1, 1995 deadline. For a new source or a source which would otherwise become subject to the Title V permit requirements after the effective date of this rule, an application for a Voluntary Operating Permit or Title V Permit must be made within 12 months of becoming subject to this rule.

1) **Company/Facility Name:** Enter the official company name and/or plant designation for the facility that is submitting the Voluntary Operating Permit application. This name in most cases will be the same as on the mailing label. If your official company name has changed please enter the new name in the box. This official facility name must be entered on every form submitted.

2) **EIQ Number:** This is the number of your individual application package as printed on the mailing label. This number must be entered on each form and worksheet returned to DNR.

3,4,5) **Facility Street Address, City and ZIP Code:** The street address is the physical location of the facility.

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- 6) **Facility Permit Contact Person:** The facility contact is the person most familiar with the operations of the plant and who should answer any questions regarding the permit application submitted for this particular facility.
- 7) **Facility Contact Phone Number:** The facility phone number is the telephone number where the contact person can be reached.
- 8) **Mailing Street/P.O. Address, 9) City, 10) State and 11) ZIP Code:** The mailing address should be entered if the mailing address of the facility is different from the street address.
- 12) **Parent Company/Owner Name:** Complete this block with the name of the parent company or owner if your company is owned wholly or in part by another company at a different location.
- 13) **Parent Company/Owner Mailing Address:** Enter the mailing address of the parent company or owner if one is identified in box #12.
- 14), 15), 16) **City, State, ZIP Code:** Enter the city, state, and ZIP code of the parent company or owner identified in box #12.
- 17) **Parent Company Contact/Agent:** Enter the name of a person to contact at the parent company or the registered agent for the company.
- 18) **Parent Company Contact Phone Number:** Enter the telephone number of the contact, if any, identified in box #17.

Number of Employees

- 19) **Facility Total:** Enter the total number of full time and the equivalent number of part time employees. Two part time workers that are employed 20 hours per week are equivalent to one full time worker.
- 20) **Company Total (Iowa):** Enter the total number of full time employees that the company employs at all locations in Iowa.

Principal Activity - Process and Products

- 21) **Standard Industrial Classification (SIC):** Enter the SIC code number that most appropriately describes the type of activity occurring at this facility. The SIC code helps to define what is part of a facility. The SIC is a four digit number used to identify industries. The first two digits are the "major group" of a facility. For example, major group 20 is "Food and Kindred Products." The last two digits of the SIC code identify the specific type of facility. Food products that have 43 as the last two digits, for instance, are Cereal Breakfast Foods

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manufacturing (SIC code 2043). The Standard Industrial Classification Manual contains all the SIC codes and may be available at your local library.

All emission units in the same SIC code (the first two digits) are considered part of the same facility. There are times when sources having different major SIC codes may be part of the same facility. In that case, use the SIC code that is the main one for your operations. An example of a facility that has more than one SIC code is a plant that both makes and prints on cardboard boxes. Its primary SIC code is 2653, Corrugated and Solid Fiber Boxes. Since the company does some of its own printing on site, its secondary SIC code is 2754, Commercial Printing, Gravure.

- 22) **Activity Description:** Enter a written description of the activity occurring at this facility.
- 23) **Secondary Activities:** Enter the SIC codes and written descriptions of any secondary activities that may be occurring at the facility (see discussion of secondary activities in #21 above).
- 24) **Designation of the Responsible Official:** Enter the information requested for the person who is designated for taking responsibility for the truth, accuracy, and completeness of the Voluntary Operating Permit Application. **Note:** The actual signature certifying truth, accuracy and completeness is to be submitted on the form for **Part 3-V**. A copy of Part 3-V is included at the end of this instruction package. DO NOT use Part 3 included with the forms package.

VOLUNTARY OPERATING PERMIT APPLICATION INSTRUCTIONS
FORM 1.1 PLANT LOCATION & LAYOUT DIAGRAM

This form is **NOT REQUIRED** for Voluntary Operating Permit Applications.

VOLUNTARY OPERATING PERMIT APPLICATION INSTRUCTIONS
FORM 1.2 SCHEMATIC - PROCESS FLOW DIAGRAM

This form is **REQUIRED** for Voluntary Operating Permit Applications.

- 1) **Company/Facility Name:** Enter the company name as it appears on Form 1.0.
- 2) **EIQ Number:** Enter the EIQ number that appears on your mailing label.
- 3) **Form 1.2 - page of :** Each plant process should have a process flow diagram submitted. Since multiple Forms 1.2 may be submitted, this box identifies each page of the total number of forms 1.2 included. As an example, page 2 of 14.
- 4) **(See example on Form 1.2)** Attach and label with company name, EIQ number, and page number all Schematic - Process Flow Diagrams for you facility.

VOLUNTARY OPERATING PERMIT APPLICATION INSTRUCTIONS
FORM 1.3 INSIGNIFICANT ACTIVITIES - POTENTIAL EMISSIONS
(567 IAC 22.102 & 22.103)

This form **MAY NOT BE USED** for Voluntary Operating Permit Applications. With respect to Voluntary Operating Permits, no emissions or activities are exempt or considered insignificant with regard to determining plantwide emissions. Forms 1.4, 1.5, 3.0 and 4.0 should be used to list all activities including those which meet the qualifications under 567 IAC 22.102 and 22.103.

**VOLUNTARY OPERATING PERMIT APPLICATION INSTRUCTIONS
FORM 1.4 POTENTIAL TOXIC EMISSIONS - SIGNIFICANT ACTIVITIES**

This form is **REQUIRED** for all Voluntary Operating Permit Applications.

- 1) **Company/Facility Name:** Enter the company name as it appears on Form 1.0.
- 2) **EIQ Number:** Enter the EIQ number that appears on your mailing label.
- 3) **Form 1.4 - page of :** Since some companies may need to use multiple Forms 1.4, this box identifies each page of the total number of Forms 1.4 that have been included.
- 4) **CAS No.:** Enter the Chemical Abstract (CAS) number of the hazardous air pollutant listed in column 5.
- 5) **Chemical Name:** Enter the name of the hazardous air pollutant that corresponds with the CAS number listed in column 4. The hazardous air pollutants of concern under the Title V permitting program are the 189 chemicals or chemical families listed in the Clean Air Act Amendments of 1990.
- 6) **Potential Emissions (Tons/Yr):** Summarize the Potential Emissions in tons per year of the toxic air pollutant identified in box 5 that is emitted from the corresponding emission units listed in box 6.
- 7) **Totals this Page:** Enter, in tons per year, the total toxic air pollutant potential emissions for this page.
- 8) **Facility Totals - Potential Emissions Toxics:** On the first Form 1.4 (Box 8) enter the total of all toxic potential emissions for the plant by adding up all of the individual Form 1.4 page totals (Box 7).

**VOLUNTARY OPERATING PERMIT APPLICATION INSTRUCTIONS
FORM 1.5 POTENTIAL EMISSIONS - SIGNIFICANT SOURCES**

This form is **REQUIRED** for all Voluntary Operating Permit Applications.

- 1) **Company/Facility Name:** Enter the company name as it appears on Form 1.0.
- 2) **EIQ Number:** Enter the EIQ number that appears on your mailing label.
- 3) **Form 1.5 - page of :** Since some companies may need to use multiple Forms 1.5, this box identifies each page of the total number of Forms 1.5 that have been included.
- 4) **Potential Emissions (Tons/Year):** Enter the total potential emissions in tons per year for each pollutant from all emission points at your facility in the corresponding box.
- 5) **Indicate which conditions subject this facility to obtaining an Iowa Operating Permit:**
Check the reason(s) why you are required to submit this Operating Permit Application.

IOWA VOLUNTARY OPERATING PERMIT APPLICATION INSTRUCTIONS FORM CA-01 CALCULATIONS

This form is a calculation worksheet to document how you arrived at certain calculated values that are used on other individual forms throughout this permit application. Duplicate this form as needed and attach it to the form for which it is the appropriate documentation.

Include a description of any assumptions used in making the calculations.

AT YOUR FACILITY RETAIN A COPY OF YOUR COMPLETED PERMIT APPLICATION, AS SUBMITTED, INCLUDING ALL CALCULATION SHEETS.

- 1) **Facility Name:** Enter the company/facility name as it appears on Form 1.0.
- 2) **EIQ Number:** Enter the EIQ number that appears on your mailing label.
- 3) **Emission Point Number:** Enter the number of the emission point (stack or vent) that is associated with the calculations you are documenting on this form. The number of this emission point must correspond to the identification number used on Form 1.2 (Schematic - Process Flow Diagram) for this emission unit.
- 4) **Emission Unit (Process) Number:** Enter the number of the emission unit (process) that is associated with the calculations you are documenting on this form. The number of this emission unit must correspond to the identification number used on Form 1.2 (Schematic - Process Flow Diagram) for this emission unit.
- 5) **Emission Unit (Process) Description or (SCC) Number:** Provide a written description or the SCC number which describes the emission unit that is associated with the calculations you are documenting on this form.
- 6) **Calculations are Provided in Support of Information Reported on Form , page :** Identify the Form number and page number of that form for which this calculation sheet provides supporting documentation. For example Form 3.0, page 17.
- 7) **Emission Calculations:** This space is provided for you to show your calculations. You may use a blank piece of paper to provide this documentation as long as the information in items 1-6 are included. This documentation will allow DNR staff to follow how certain values were calculated. Please provide legible calculations.

**IOWA VOLUNTARY OPERATING PERMIT APPLICATION INSTRUCTIONS
FORM 2.0 EMISSION POINT INFORMATION**

This form is **required** for all Voluntary Operating Permit applications.

- 1) **Company/Facility Name:** Enter the company name as it appears on Form 1.0.
- 2) **EIQ Number:** Enter the EIQ number that appears on your mailing label.
- 3) **Form 2.0 - page of :** Since some companies may need to use multiple Forms 2.0, this box identifies each page of the total number of forms 2.0 that have been included.
- 4) **Emission Point Number:** Enter the identification number your company assigns to this particular stack/vent.

The emission point number identifies the point where emissions vent to the atmosphere. Emission points can include stacks, horizontal vents, building ventilation vents, and fugitive sources such as material storage piles (coal, aggregate, etc.), and volatile liquid storage tanks.

- 5) **Emission Point Description:** Provide a brief description of the emission point, i.e. boiler #1 & 2 stack, paint booth #7 wall vent, etc.

ITEMS 6 - 12 DO NOT NEED TO BE FILLED IN FOR VOLUNTARY OPERATING PERMIT APPLICATIONS.

EMISSION POINT INFORMATION

13. **COMPOSITION OF GAS STREAM:** Enter the velocity, flow rate, pollutant emission rate and units (eg. gr/scf, lbs/MM Btu), and temperature of the exhaust stream. Be sure to enter the values in the same units of measure as already listed on Form 2.0. Percent moisture in the exhaust stream is requested, if available.

ITEMS 14 - 17 DO NOT NEED TO BE FILLED IN FOR VOLUNTARY OPERATING PERMIT APPLICATIONS.

IOWA VOLUNTARY OPERATING PERMIT APPLICATION INSTRUCTIONS FORM 3.0 EMISSION UNIT DESCRIPTION - POTENTIAL EMISSIONS

This form is **required** for all Voluntary Operating Permit applications.

DUPLICATE THIS FORM AS NEEDED AND SUBMIT A COMPLETE COPY FOR EACH EMISSION UNIT (process) AT YOUR FACILITY.

An emission unit is the specific process that generates the air pollution emissions. An example of an emission unit is a boiler combusting coal (coal is the throughput). However, if an emission unit has two throughputs - such as a grain dryer:
throughput 1: natural gas combustion - NO_x, CO, etc. emissions
throughput 2: grain - produces particulate emissions
- then the process should be listed as TWO emission units (one for each throughput) each assigned a separate Emission Unit Number, with TWO forms completed (one for each Emission Unit).

Potential emissions must be calculated based upon the maximum design rate of the emission unit and 8760 hours of operation per year. The only exception to this is if this emission unit has been limited in either process rate or hours of operation by a federally enforceable permit or order.

IF YOU ARE PROPOSING A NEW PROCESS LIMITATION FOR THIS EMISSION UNIT YOU MUST SUBMIT, WITH PART 2, SECTION 4, AN ADDITIONAL FORM 3.0 FOR THIS EMISSION UNIT WITH THE "PROPOSED LIMIT" BOX MARKED AND THE NEW LIMITATIONS INDICATED AND NEW POTENTIAL EMISSIONS CALCULATED.

The proposed limit box is located in the upper right hand corner of Form 3.0. New process limitations are effective only after the operating permit is issued by the Department. Until permit issuance your potential emissions must be calculated on the basis of an 8760 hour operating schedule or as defined under existing permit limits.

- 1) **Company/Facility Name:** Enter the company name as it appears on Form 1.0.
- 2) **EIQ Number:** Enter the EIQ number that appears on your mailing label.
- 3) **Form 3.0 - page of :** A separate Form 3.0 must be completed for each emission unit at your plant. An emission unit is the process that produces the air pollution emissions, e.g. boiler, paint booth, etc. Since many companies will need to use multiple Forms 3.0, this box identifies each page of the total number of forms 3.0 that have been included.
- 4) **Emission Point Number:** Enter the emission point number that your company assigns to the stack or vent serving this emission unit. You may use any numbering scheme that is

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appropriate to your plant, but this numbering scheme must be used consistently throughout the application to identify each emission point. **Each fugitive emissions source, such as uncontrolled rock crushers, dump pits, etc. should be assigned a separate emission point number.**

5) **Emission Point Description:** Provide a written description of the stack or vent or indicate if this is a fugitive emissions source.

6) **EMISSION UNIT NUMBER:** Enter the identification number that your company assigns to this emission unit. **Keep in mind that an emission unit is the specific process that generates the air pollution emissions, e.g. boiler, paint booth.**

7) **SCC Number:** Enter the Source Classification Code Number (SCC) that identifies the type of process or activity occurring at this emission unit. The SCC number corresponds to the Description of Process (Box 8) and specific "emission factor units"(lbs/ton, lbs/gal, etc).

8) **DESCRIPTION OF PROCESS:** Provide a written description of the process as defined by the SCC number entered in box 7 above. If a SCC number and corresponding description is not available for this specific process please provide your best description of the process.

9) **Name of Manufacturer:** Enter the name of the manufacturer of this emission unit (process equipment).

10) **Model Name - Model Number - Serial Number:** Enter the model name, number, and serial number of this emission unit.

11) **Date of Construction:** Enter the date on which construction was commenced for this emission unit. For the purposes of this question commenced construction means the date that an owner or operator has undertaken a continuous program of construction or modification or that the owner or operator has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction or modification.

12) **Date of Installation:** Enter the date of the actual installation of the emission unit equipment. In many cases this will be the same date as the date of construction.

13) **Date of Modification:** If this emission unit has been modified since it was originally installed, please enter the date of the last modification.

14) **Raw Material - OR - Fuels Used:** Enter the raw material used in this emission unit (process). For combustion sources enter the fuel used. If multiple raw materials or fuels are used at this emission unit list the worst case fuel or raw material and the pollutant/s for which it is worst case.

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For example: Fuels

Coal - SO₂, TSP & PM₁₀

Natural Gas - NO_x

Raw Materials

Paint #1 - VOC, Toxics, Lead

Paint #2 - TSP, PM₁₀

15) Federally Enforceable Limit: If this emission unit is subject to any operating limitation, such as limitations on hours of operation, raw materials, or amount of fuel combusted, etc., enter this limitation here. Enforceable limitations are usually established in the construction/operating permit or in an enforcement order.

16) Permit or Rule Establishing Limit: Enter the source of the operating limitation specified in box 15. The source may be a construction or operating permit, or an administrative or court order. In either case list the permit number or the order number here.

17) Maximum Hourly Design Rate: Enter the maximum hourly production rate for this emission unit. For combustion units this is the maximum heat input capacity (in millions of Btu per hour) for the equipment using the fuel specified in box 14.

18) Air Pollution Control Equipment (CE) Number: Enter the identification number your company has assigned to this piece of emission control equipment. This ID number must correspond to that used in the Schematic - Process Flow Diagram included on Form 1.2. Up to 4 different control devices may be identified for this emission unit.

19) Monitoring Equipment: This information is **NOT** required for Voluntary Operating Permit applications.

POTENTIAL EMISSIONS

20) Air Pollutant: Besides the 7 listed air pollutants there are spaces for 3 additional regulated air pollutants (eg. ozone, Hazardous Air Pollutants, fluorides, vinyl chloride, etc.) These 3 boxes are available to list any air contaminants, not listed in the form, emitted from this emission unit. Please indicate the identity of the pollutant by entering the CAS number and/or name of the pollutant. Use additional pages if more than 3 other pollutants are potentially emitted from this unit.

21) Emission Factor: Enter the numerical emission factor (in pounds per unit) being used to calculate the potential emissions from this unit. As noted at the bottom of the form, emission factors can be obtained for some processes from EPA documents or calculated from stack test data, worksheets, or continuous emission monitoring data. See form CE-01 for a discussion of the use of stack test results.

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22) **Emission Factor Units:** Enter the emission factor units that correspond to the numerical emission factor utilized in box 21. Typical emission factor units are expressed in pounds of pollutant emitted per unit of production or unit of fuel combusted. Examples are pounds/ton, pounds/gallon, pounds/million cubic feet, etc.

23) **Source of Emission Factor:** Indicate the source of the emission factor used in box 21. See the bottom of Form 3.0 for typical sources of emission factors.

24) **Ash or Sulfur %:** For combustion sources only, enter the percent ash in the fuel in the PM-10 and TSP rows. Enter the percent sulfur in the fuel in the SO_x row.

25) **Potential Hourly Uncontrolled Emissions (Lbs/Hr):** Calculate the potential uncontrolled emissions on an hourly basis and enter the value in pounds per hour. To calculate potential uncontrolled emissions multiply the Maximum Hourly Design Rate (Box 17) by the Emission Factor (Box 21). In order for this calculation to work correctly the emission factor units must correspond to the units used in box 17. For example, a spreader stoker boiler burning 3 tons per hour of subbituminous coal times the emission factor of 60 pounds of TSP per ton of coal burned equals 180 pounds per hour of TSP emitted uncontrolled.

26) **Combined Control Efficiency %:** If only one emission control device is used enter the percent control efficiency. Be sure to enter the control efficiency in the box corresponding to the air pollutant for which that efficiency is appropriate. For example, a device may be 90% efficient in removing TSP from the air stream but significantly less efficient in removing PM₁₀.

If more than one control device applies to the same pollutant at an emission point, the combined control efficiency is calculated using the following formula:

$$\text{Combined Control Efficiency} = CE_1 + CE_2 - [(CE_1 \times CE_2) \div 100]$$

where CE_1 = Control Efficiency for First Device

CE_2 = Control Efficiency for Second Device

For example, when two devices are used to remove the pollutant PM₁₀ from the same emission point, the control efficiencies must be combined. For example, if the first device has a control efficiency of 50% and the second device has an efficiency of 80%, the calculation of combined efficiency is as follows:

$$\begin{aligned}\text{Combined Control Efficiency} &= 50 + 80 - [(50 \times 80) \div 100] \\ &= 130 - [4000 \div 100] \\ &= 130 - [40] \\ &= 90\%\end{aligned}$$

Thus, the combined control efficiency for PM₁₀ at this emission point would be 90%.

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Note that the control efficiency of a secondary piece of emission control equipment is dependent upon particle size, grain loading to the device, air flows, etc. Therefore, caution should be used in assigning the control efficiency to the second control device.

27) Potential Hourly Controlled Emissions (Lbs/Hr): Calculate the hourly controlled emissions by applying the Combined Control Efficiency (box 26) to the Potential Hourly Uncontrolled Emissions (box 25). Enter the value in pounds per hour.

28) Potential Annual Controlled Emissions (Tons/Yr): Calculate the annual potential controlled emissions by multiplying the Potential Hourly Controlled Emissions (box 27) by 8760 hours and converting pounds per year to tons per year.

Unless the emission unit is subject to enforceable limitations on hours of operation (box 15), Potential Emissions is based on 8760 hours per year.

IOWA VOLUNTARY OPERATING PERMIT APPLICATION INSTRUCTIONS FORM 4.0 EMISSION UNIT - ACTUAL OPERATIONS AND EMISSIONS

This form is **required** for all Voluntary Operating Permit applications.

Duplicate this form as needed. A separate Form 4.0 must be completed for each emission unit at your facility.

- 1) **Company/Facility Name:** Enter the company name as it appears on Form 1.0.
- 2) **EIQ Number:** Enter the EIQ number that appears on your mailing label.
- 3) **Form 4.0 - page of :** A separate Form 4.0 must be completed for each emission unit at your plant. An emission unit is the process that produces the air pollution emissions, e.g. boiler, paint booth, etc. Since many companies will need to use multiple Forms 4.0, this box identifies each page of the total number of forms 4.0 that have been included.
- 4) **Emission Point Number:** Enter the emission point number that your company assigns to this **stack or vent**. You may use any numbering scheme that is appropriate to your plant, but this numbering scheme must be used consistently throughout the application to identify each emission point. **Each fugitive emissions source, such as uncontrolled rock crushers, dump pits, etc. should be assigned a separate emission point number.**
- 5) **Emission Point Description:** Provide a written description of the stack or vent or indicate if this is a fugitive emissions source.
- 6) **EMISSION YEAR:** Enter the calendar year for which you are calculating ACTUAL emissions from this emission unit. Usually this will be the previous year.
- 7) **EMISSION UNIT NUMBER:** Enter the identification number that your company assigns to this emission unit. **Keep in mind that an emission unit is the specific process that generates the air pollution emissions, e.g. boiler, paint booth.**
- 8) **SCC Number:** Enter the Source Classification Code Number (SCC) that identifies the type of process or activity occurring at this emission unit. The SCC number corresponds to the Description of Process (Box 9) and specific "emission factor units"(lbs/ton, lbs/gal, etc).
- 9) **DESCRIPTION OF PROCESS:** Provide a written description of the process as defined by the SCC number entered in box 8 above. If a SCC number and corresponding description is not available for this specific process please provide your best description of the process.

ACTUAL THROUGHPUT

- 10) **Raw Material:** Identify the raw material utilized in this emission unit. For combustion sources the raw material is the fuel combusted. If a process unit is also a combustion source (i.e., process dryer) separate Forms 4.0 must be completed for the fuel used and the raw material processed.
- 11) **Actual Throughput - Yearly Total:** Enter the actual amount of the raw material (identified in box 10) that the emission unit processed during the emission year specified in box 6.
- 12) **Units Raw Material:** Enter the units (tons, gallons, bushels, million cubic feet, etc.) of the raw material total specified in box 11.

Actual Operating Rate/Schedule

- 13) **Percent of Total Operating Time:** For each of the four calendar quarters, specify the percentage of the total annual throughput attributable to each quarter. Estimates are acceptable. The total for all four quarters must equal 100%.
- 14) **Hours/Day:** This figure is the normal number of hours per day that the equipment or process (Emission Unit) was in operation. Since some processes are operated on a different daily schedule over the course of the year, enter the hours per day the emission unit operated during each of the four calendar quarters.
- 15) **Days/Week:** This figure is the normal number of days per week that the equipment or process (Emission Unit) was in operation. Since some processes are operated on a different weekly schedule over the course of the year, enter the days per week that the emission unit operated during each of the calendar quarters.
- 16) **Weeks / 13 Week Quarter:** For each calendar quarter enter the number of weeks that the emission unit operated. There are 13 possible weeks of operation in each calendar quarter.

Associated Equipment

- 17) **Control Equipment (CE) Number:** Enter the air pollution emissions control equipment identification number(s) that is/are associated with this emission unit. This identification number must correspond to the number used in the Schematic - Process Flow Diagram (Form 1.2).
- 18) **Monitoring Equipment (ME) Number:** This information is **NOT** required for Voluntary Operating Permit applications.

ACTUAL EMISSIONS

- 19) **Air Pollutant:** Besides the 7 listed air pollutants there are spaces for 3 additional regulated air pollutants (eg. ozone, Hazardous Air Pollutants, fluorides, vinyl chloride, etc.) These 3 boxes are

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available to list any air contaminants, not listed in the form, emitted from this emission unit. Please indicate the identity of the pollutant by entering the CAS number and/or name of the pollutant. Use additional pages if more than 3 other pollutants are potentially emitted from this unit.

20) Emission Factor: Enter the numerical emission factor (in pounds per unit) being used to calculate the actual emissions from this unit. As noted at the bottom of the form, emission factors can be obtained for some processes from EPA documents or calculated from stack test data, worksheets, or continuous emission monitoring data. See form CE-01 for a discussion of the use of stack test results.

21) Emission Factor Units: Enter the emission factor units that correspond to the numerical emission factor utilized in box 20. Typical emission factor units are expressed in pounds of pollutant emitted per unit of production or unit of fuel combusted. Examples are pounds/ton, pounds/gallon, pounds/million cubic feet, etc.

22) Source of Emission Factor: Indicate the source of the emission factor used in box 20. See the bottom of Form 4.0 for typical sources of emission factors.

23) Ash or Sulfur %: For combustion sources only, enter the percent ash in the fuel in the PM-10 and TSP rows. Enter the percent sulfur in the fuel in the SO_x row.

24) Combined Control Efficiency %: If only one emission control device is used enter the percent control efficiency. Be sure to enter the control efficiency in the box corresponding to the air pollutant for which that efficiency is appropriate. For example, a device may be 90% efficient in removing TSP from the air stream but significantly less efficient in removing PM₁₀.

If more than one control device applies to the same pollutant at an emission point, the combined control efficiency is calculated using the following formula:

$$\text{Combined Control Efficiency} = CE_1 + CE_2 - [(CE_1 \times CE_2) \div 100]$$

where CE_1 = Control Efficiency for First Device

CE_2 = Control Efficiency for Second Device

For example, when two devices are used to remove the pollutant PM₁₀ from the same emission point, the control efficiencies must be combined. For example, if the first device has a control efficiency of 50% and the second device has an efficiency of 80%, the calculation of combined efficiency is as follows:

$$\begin{aligned}\text{Combined Control Efficiency} &= 50 + 80 - [(50 \times 80) \div 100] \\ &= 130 - [4000 \div 100] \\ &= 130 - [40] \\ &= 90\%\end{aligned}$$

Thus, the combined control efficiency for PM₁₀ at this emission point would be 90%.

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Note that the control efficiency of a secondary piece of emission control equipment is dependent upon particle size, grain loading to the device, air flows, etc. Therefore, caution should be used in assigning the control efficiency to the second control device, it may be considerably less efficient as a secondary control device then it would be as the primary emission control device.

25) Actual Emissions (Tons/Yr): This is the amount in tons per year of the pollutant emitted at the emission unit described. All figures should be rounded to two decimal places. There are two possible formulas.

Method 1: If the Sulfur or Ash percent is not given or the unit is not a combustion source, use the following formula:

Actual Emissions = Actual Throughput (Box 11) x Emission Factor x [(100 - Percent Control Efficiency) ÷ 100] ÷ 2000.

For example, assume the Actual Throughput is 30,000 tons of grain processed, the PM10 emission factor is .91 pounds of PM10 emitted per ton of grain processed and a PM10 control device for this emission point has an efficiency of 90%. Using the formula above:

$$\begin{aligned}\text{Actual Emissions} &= 30,000 \times .91 \times [(100 - 90) \div 100] \div 2000 \\ &= 27,300 \times [10 \div 100] \div 2000 \\ &= 27,300 \times [.1] \div 2000 \\ &= 2,730 \div 2000 \\ &= 1.365 \text{ tons of PM10 emitted per year}\end{aligned}$$

Note: If no control devices are used, the Control Efficiency is 0%. You would enter 1.37 in the PM10 box in Box 25.

Method 2: If the Sulfur or Ash percent is greater than 0, the following formula must be used:

Actual Emissions = Actual Throughput x Emission Factor x % Ash or Sulfur from fuel analysis x [(100 - Percent Control Efficiency) ÷ 100] ÷ 2000.

For example, assume the Actual Throughput is 10,000 tons of fuel burned, the SOx emission factor is 30 pounds of SOx emitted per percent of sulfur in the fuel burned, the Sulfur content of the fuel is 1.7% and the SOx control device has an efficiency of 50%. Using the formula above:

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$$\begin{aligned}\text{Actual Emissions} &= 10,000 \times 30 \times 1.7 \times [(100 - 50) \div 100] \div 2000 \\ &= 300,000 \times 1.7 \times [50 \div 100] \div 2000 \\ &= 300,000 \times 1.7 \times [.5] \div 2000 \\ &= 510,000 \times [.5] \div 2000 \\ &= 255,000 \div 2000 \\ &= 127.50 \text{ tons of SOx emitted per year}\end{aligned}$$

You would enter 127.50 tons in the SOx box in Box 25, Actual Emissions on Form 4.0.

**IOWA VOLUNTARY OPERATING PERMIT APPLICATION INSTRUCTIONS
FORM CE-01 POLLUTION CONTROL EQUIPMENT DATA SHEET**

This form is **REQUIRED** to be completed for **each** piece of air pollution emissions control equipment. Duplicate this form as needed.

- 1) **Company/Facility Name:** Enter the company name as it appears on Form 1.0.
- 2) **EIQ Number:** Enter the EIQ number that appears on your mailing label.
- 3) **Form CE-01 page of** : Since multiple forms CE-01 may need to be submitted, this box identifies each page of the total number of Forms CE-01 included. As an example, page 2 of 14.
- 4) **CONTROL EQUIPMENT NUMBER:** Enter the control equipment number for this pollution control device as specified on your Schematic - Process Flow Diagram (Form 1.2).
- 5) **Type of Pollution Control Equipment:** Describe the type of pollution control equipment being represented on this form. For example, pulse jet baghouse, venturi scrubber, etc.
- 6) **Manufacturer:** List the name of the manufacturer of this piece of pollution control equipment.
- 7) **Model:** List the model of this piece of pollution control equipment.
- 8) **Serial Number:** Enter the Serial Number of this piece of pollution control equipment.
- 9) **Date Installed:** Enter the date of installation at your facility of this piece of pollution control equipment.
- 10) **Does This Equipment Exhaust to the Atmosphere?** Mark the box that is appropriate. Examples of sources that do not vent to the atmosphere are those that vent back into the work place, or to other processes or control devices.

Associated Equipment

- 11) **Associated Equipment:** List the page(s) of Form 1.2, Schematic - Process Flow Diagram, which shows how this piece of pollution control equipment is associated with processes, monitoring equipment, and emission points.

Emissions Data

12) Equipment Control Efficiency Basis: Check the box that describes the basis upon which you determined this device's emission control efficiency.

Stack tests may be used to quantify emissions in your application.

Previously performed stack tests

For stack tests please include the test date and the test method used. If stack test data is used a copy of the REPORT SUMMARY including required protocol forms must be attached. **Do not submit the entire stack test report.**

Stack testing for Operating Permit purposes

If you are planning to conduct a stack test for the purposes of quantifying emissions for the Operating Permit application:

- ✕. Obtain a DNR Operating Permit Stack Test Protocol form from the department.
- ✕. Provide all information as required by the protocol form with the Operating Permit Application.

13) Pollutant Controlled: Specify the different air pollutants being controlled by this piece of pollution control equipment.

14) Capture Efficiency: Enter the percent emission capture efficiency of this control device. For example, although a baghouse may be 99% efficient in controlling particulate emissions, the pickup hood at the process may be only partially successful in capturing all of the air contaminants emitted by the process. Estimates of capture efficiency are acceptable if actual capture efficiency is unknown. Be aware that capture efficiencies may be different for different pollutants, i.e. PM10 vs. TSP.

15) Control Efficiency %: Pollution control efficiencies may be obtained from the manufacturer's design control efficiency times the capture efficiency. Other sources of pollution control equipment efficiency are the AP-42 control factors, or by calculating the efficiency from the tested inlet and outlet concentrations.

**IOWA VOLUNTARY OPERATING PERMIT APPLICATION INSTRUCTIONS
FORM ME-01 CONTINUOUS MONITORING SYSTEMS**

This form is NOT required not required for your Voluntary Operating Permit Application.

**IOWA VOLUNTARY OPERATING PERMIT APPLICATION INSTRUCTIONS
FORM 5.0 TITLE V ANNUAL PERMIT FEE**

This form is NOT required for Voluntary Operating Permit Applications. No fees are required for Voluntary Operating Permits.

IOWA VOLUNTARY OPERATING PERMIT APPLICATION

PART 2 - APPLICATION INSTRUCTIONS

Part 2 of the Voluntary Operating Permit Application, Requirements and Compliance, is a self-guiding set of forms with the instructions integrated into the forms themselves. No separate set of instructions is attached for Part 2.

Please read and carefully follow the Part 2 form's instructions and they should guide you through the process of determining the applicable requirements that pertain to the emission units at your facility.

SECTION 1 DOES NOT NEED TO BE SUBMITTED WITH YOUR VOLUNTARY OPERATING PERMIT APPLICATION.

SECTION 2 ONLY NEED TO BE SUBMITTED FOR THOSE PIECES OF EQUIPMENT FOR WHICH ALTERNATIVE LIMITS ARE BEING PROPOSED.

SECTION 3 ONLY FORM VOL-01 MUST BE SUBMITTED AND ONLY IF THE FACILITY IS NOT IN COMPLIANCE WITH THE CONSTRUCTION PERMITTING REQUIREMENTS.

SECTION 4 - PROPOSALS (LIMITS & ALTERNATIVES), FORM PR-01 MUST BE SUBMITTED IF YOU ARE PROPOSING LIMITS TO BECOME ELIGIBLE FOR A VOLUNTARY OPERATING PERMIT, ALTERNATIVE LIMITS OR OPERATING SCENARIOS. FOLLOW THE DIRECTIONS IN THIS SECTION FOR YOUR PROPOSALS.

Although we have provided an outline of the major air quality requirements that you may be subject to, **you are ultimately responsible for being aware of and being in compliance with all existing and new regulations, both state and federal.**

Incorporated into Part 2 of the application are references to U.S. Code of Federal Regulations (CFR) and Iowa Administrative Code (IAC) rules and regulations that may apply to your facility. Copies of Federal and State rules can be obtained at the State Law Library, State of Iowa Capitol Building, Des Moines, and at many local libraries.

New Clean Air Act Regulations Are Published in the Federal Register.

Because regulations published in the Federal Register may become effective before being published in the Code of Federal Regulations, we recommend that you utilize the EPA Technology Transfer Network (TTN Bulletin Board) and the Federal Register to keep apprised of any new regulations (see details in the introduction to these instructions).

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**Iowa Statutes Regarding Air Quality are Published in the Code of Iowa.
New Iowa Rules are Published in the Iowa Administrative Bulletin.**
Regulations are incorporated into the Iowa Administrative Code periodically.

The permit application must be supplemented if, due to construction, modification, or new regulatory requirement, your permit application no longer accurately describes the operation or regulatory requirements of the facility.

FORM VOL-1 VOLUNTARY OPERATING PERMIT COMPLIANCE SCHEDULE

This form is **REQUIRED** for Voluntary Operating Permit Applications where the facility is in compliance for the past year to date with all requirements -- **except the requirement for construction permits established in 567 IAC 22.1(1).**

All appropriate application forms (Forms 2.0, 3.0, 4.0, CA-01, CE-01, and ME-01), describing all equipment listed in this form, must accompany the permit application.

- 1) **Company/Facility Name:** Enter the company name as it appears on Form 1.0.
- 2) **EIQ Number:** Enter the EIQ number that appears on your mailing label.
- 3) **Form VOL-1 - page ___ of ___:** If there is a need to use more than one of these forms, this box identifies each page of the total number of Forms VOL-1 that have been included.

On the form there are many columns under each of items 4, 5, 6, 7, and 8. For each construction permit for which an application has been submitted, one row of items 4-8 needs to be filled out.

- 4) **Emission Unit Number:** Enter the identification number that your company assigns to this emission unit as identified on Form 3.0.

A Form 3.0 must be completed for each emission unit -- showing unrestricted potential emissions.

An additional Form 3.0 must be completed, with the "Proposed Limit" box checked in the upper right hand corner of the form, -- showing any limits that are being proposed in the construction permit application.

- 5) **Emission Point Number:** Enter the emission point number that your company assigns to the stack or vent serving this emission unit as identified on Form 2.0.
- 6) **Control Equipment Number:** Enter the control equipment number for the pollution control device serving this emission unit as identified on Form CE-01.
- 7) **Monitoring Equipment Number:** Enter the monitoring equipment number of all monitoring equipment associated with this emission unit as identified on ME-01.
- 8) **Date Construction Permit Submitted to DNR or Local Program:** Enter the date on which the construction permit application was submitted for each emission unit.

DO NOT ENTER ANYTHING IN THE BOX LABELLED 'FOR DNR USE ONLY'.

PART 3-V APPLICATION CERTIFICATION

Voluntary Operating Permit Applications must be accompanied with this application certification. Applications submitted without appropriate certification signatures will not be considered to be complete.

DO NOT USE THE FORM CONTAINED IN THE FORMS PACKAGE. INSTEAD USE THE PART 3-V FORMS FOUND IN THESE INSTRUCTIONS WHEN APPLYING FOR A VOLUNTARY OPERATING PERMIT ONLY.

THERE ARE TWO APPLICATION CERTIFICATION FORMS FOR VOLUNTARY OPERATING PERMIT APPLICANTS:



PART 3-V APPLICATION CERTIFICATION

Use only if the source is in compliance with all requirements.



PART 3-V NONCOMPLIANCE APPLICATION CERTIFICATION

Use only if the source is in compliance with all requirements except the requirement to obtain construction permits (567 IAC 22.1(1))

PART 3-V APPLICATION CERTIFICATION INSTRUCTIONS:

Complete the Facility Name, EIQ Number, Facility Street Address, City and ZIP Code as it appears on Form 1.0

STATEMENT OF CERTIFICATION OF COMPLIANCE

The rules cited on the form and in the Act require that a responsible company official complete and sign the Compliance Status statement. That official should carefully read, complete and sign this statement. **The official is stating that the facility is in compliance with all applicable regulations.**

STATEMENT OF TRUTH, ACCURACY AND COMPLETENESS

The rules cited on the form and in the Act require that a responsible company official complete and sign the Truth, Accuracy and Completeness statement. That official should carefully read, complete and sign this statement.

The responsible company official should be designated on Form 1.0 and should be the same person signing the certifications.

SUBMIT THIS FORM WITH YOUR VOLUNTARY OPERATING PERMIT APPLICATION. FAILURE TO SUBMIT THIS FORM WILL RESULT IN YOUR APPLICATION BEING CONSIDERED INCOMPLETE.

WARNING: Significant enforcement authority is provided for in the Clean Air Act Amendments of 1990 for sources or officials who knowingly misrepresent the emissions or conditions at their facility.

PART 3-V NONCOMPLIANCE APPLICATION CERTIFICATION

Voluntary Operating Permit Applications must be accompanied with this application certification. Applications submitted without appropriate certification signatures will not be considered to be complete.

DO NOT USE THE FORM CONTAINED IN THE FORMS PACKAGE. INSTEAD USE THE PART 3-V FORMS FOUND IN THESE INSTRUCTIONS WHEN APPLYING FOR A VOLUNTARY OPERATING PERMIT ONLY.

THERE ARE TWO APPLICATION CERTIFICATION FORMS FOR VOLUNTARY OPERATING PERMIT APPLICANTS:



PART 3-V APPLICATION CERTIFICATION

Use only if the source is in compliance with all requirements.



PART 3-V NONCOMPLIANCE APPLICATION CERTIFICATION

Use only if the source is in compliance with all requirements except the requirement to obtain construction permits (567 IAC 22.1(1))

PART 3-V NONCOMPLIANCE APPLICATION CERTIFICATION INSTRUCTIONS:

Complete the Facility Name, EIQ Number, Facility Street Address, City and ZIP Code as it appears on Form 1.0

STATEMENT OF CERTIFICATION OF COMPLIANCE

The rules cited on the form and in the Act require that a responsible company official complete and sign the Compliance Status statement. That official should carefully read, complete and sign this statement. **The official is stating that the facility is in compliance with all applicable regulations - except the requirement to obtain construction permits. The statement also attests that the application includes a list of the equipment for which construction permits have not been issued.**

STATEMENT OF TRUTH, ACCURACY AND COMPLETENESS

The rules cited on the form and in the Act require that a responsible company official complete and sign the Truth, Accuracy and Completeness statement. That official should carefully read, complete and sign this statement.

The responsible company official should be designated on Form 1.0 and should be the same person signing the certifications.

SUBMIT THIS FORM WITH YOUR VOLUNTARY OPERATING PERMIT APPLICATION. FAILURE TO SUBMIT THIS FORM WILL RESULT IN YOUR APPLICATION BEING CONSIDERED INCOMPLETE.

WARNING: Significant enforcement authority is provided for in the Clean Air Act Amendments of 1990 for sources or officials who knowingly misrepresent the emissions or conditions at their facility.

Form VOL-01 Voluntary Operating Permit Compliance Schedule

(567 IAC 22.203(2)"e"(2))

1) Facility/Company Name			2) EIQ No.		Form VOL-01 Pg ____ of ____
Complete one row for each piece of equipment for which a construction permit has been applied					
4) Emission Unit No.	5) Emission Point No.	6) Control Equip. No.	7) Monitoring Equip. No.	8) Date Construction Permit Submitted to DNR or Local Program	9) For DNR use Only

PART 3-V APPLICATION CERTIFICATION

This application certification must be properly signed, completed and submitted with all applications and with supplemental information submitted in support of this application. Applications submitted without appropriate signatures will not be considered to be complete.

Facility/Company Name	EIQ No.	
Facility Street Address	City	Zip Code

STATEMENT OF CERTIFICATION OF COMPLIANCE

As required by subparagraph 567 IAC 22.203(2)"e"(4) this certification of compliance must be signed by the designated responsible official designated on Form 1.0 of this application. This certification is consistent with requirements established in subrule 567 IAC 22.203(1)"d".

"I CERTIFY UNDER PENALTY OF LAW THAT, BASED ON INFORMATION AND BELIEF FORMED AFTER REASONABLE INQUIRY, THAT THE STATEMENTS AND INFORMATION CONTAINED IN THIS DOCUMENT ACCURATELY REFLECT THAT THIS FACILITY HAS BEEN IN COMPLIANCE FOR THE PAST YEAR TO DATE AND THAT THIS IS A TRUE AND ACCURATE STATEMENT."

Signature of Responsible Official

Title of Responsible Official

Print Name of Responsible Official

Date Signed**CERTIFICATION OF TRUTH, ACCURACY AND COMPLETENESS**

As required by 567 IAC 22.203(1)"d" this certification of truth, accuracy and completeness must be signed by a responsible official (as defined in 567 IAC 22.100 and designated on this application on Form 1.0) and submitted with the application.

"I CERTIFY UNDER PENALTY OF LAW THAT, BASED ON INFORMATION AND BELIEF FORMED AFTER REASONABLE INQUIRY, THE STATEMENTS AND INFORMATION CONTAINED IN THIS APPLICATION ARE TRUE, ACCURATE, AND COMPLETE."

Signature of Responsible Official

Title of Responsible Official

Print Name of Responsible Official

Date Signed

PART 3-V NONCOMPLIANCE APPLICATION CERTIFICATION

This application certification must be properly signed, completed and submitted with all applications and with supplemental information submitted in support of this application. Applications submitted without appropriate signatures will not be considered to be complete. **This form is to be used only for sources who are not in compliance with the requirement to obtain a construction permit as stated in 567 IAC 22.1(1). Facilities that are in violation of any other applicable requirement may not apply for a Voluntary Operating Permit.**

Facility/Company Name	EIQ No.	
Facility Street Address	City	Zip Code

STATEMENT OF CERTIFICATION OF COMPLIANCE STATUS

As required by subparagraph 567 IAC 22.203(2)"e"(4) this certification of compliance must be signed by the designated responsible official designated on Form 1.0 of this application. This certification is consistent with requirements established in subrule 567 IAC 22.203(1)"d".

"I CERTIFY UNDER PENALTY OF LAW THAT, BASED ON INFORMATION AND BELIEF FORMED AFTER REASONABLE INQUIRY, THAT THE STATEMENTS AND INFORMATION CONTAINED IN THIS DOCUMENT ACCURATELY REFLECT THAT THIS FACILITY HAS BEEN IN COMPLIANCE FOR THE PAST YEAR TO DATE WITH ALL REQUIREMENTS -- EXCEPT THE REQUIREMENT FOR CONSTRUCTION PERMITS ESTABLISHED IN 567 IAC 22.1(1) -- AND THAT THIS IS A TRUE AND ACCURATE STATEMENT. A LIST OF THOSE SOURCES WHICH ARE NOT IN COMPLIANCE WITH THE 567 IAC 22.1(1) REQUIREMENT IS ATTACHED TO THIS APPLICATION"

Signature of Responsible Official

Title of Responsible Official

Print Name of Responsible Official

Date Signed**CERTIFICATION OF TRUTH, ACCURACY AND COMPLETENESS**

As required by 567 IAC 22.203(1)"d" this certification of truth, accuracy and completeness must be signed by a responsible official (as defined in 567 IAC 22.100 and designated on this application on Form 1.0) and submitted with the application.

"I CERTIFY UNDER PENALTY OF LAW THAT, BASED ON INFORMATION AND BELIEF FORMED AFTER REASONABLE INQUIRY, THE STATEMENTS AND INFORMATION CONTAINED IN THIS APPLICATION ARE TRUE, ACCURATE, AND COMPLETE."

Signature of Responsible Official

Title of Responsible Official

Print Name of Responsible Official

Date Signed